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CNERC Annual Technical Symposium 2021 2021.09.30

CNERC Annual Technical Symposia are organized as technical platforms to promote technical discussions and exchange among research personnel of CNERC. The first Annual Technical Symposium was held in June 2020, and favorable responses from Project Investigators with over 20 nominations were received, and a total of 12 presentations were made during the one-day event.

The CNERC Annual Technical Symposium 2021 was held on 30 September 2021 as a half-day event, and it was our honour to have **Ir Dennis Wan, Principal Assistant Secretary of Development Bureau**, and **Ir H. S. Kan, Government Engineer of Civil Engineering and Development Department**, both of the Government of Hong Kong SAR, being our Honorable Judges. An invited presentation was made by Dr. H. C. Ho, Deputy Executive Secretary and Research Assistant Professor of CNERC, and there were a total of 8 presentations made by senior research students.



From left: Dr. H. C. Ho, Prof. Michael C. H. Yam, Ir H. S. Kan, Prof. K. F. Chung, Ir Dennis Wan, Dr. Andy Y. F. Leung, and Dr. T. M. Chan.



The Symposium was kicked off with a welcome speech by Prof. K. F. Chung, Director of CNERC, and followed with an invited presentation by Dr. H. C. Ho.



Prof. K. F. Chung made a welcome speech.



Dr. H. C. Ho presented on “Design and Construction using High Quality Chinese Steels in Hong Kong and Beyond”.



Ms. Mengfei ZHU, Research Student (CEE) presented on “Structural adequacy of high strength S690 and S960 welded H-sections with splices”.



Mr. Partha DEBNATH, Research Student (CEE) presented on “Experimental and numerical investigation of CFST blind-bolted connections under tensile loading”.



Ms. Xuemei LIN, Research Student (BRE) presented on “Experimental and numerical study of the structural performance of bearing-type high strength steel bolted connections”.



Ms. Bingchen ZHOU, Research Student (ME) presented on “Control of continuous and discontinuous precipitation in advanced high-strength steels”.



Mr. Mohammed HUSSEIN, Research Student (BRE) presented on “A digital-twin based approach for sustainable logistics planning in modular integrated construction projects”.



Ms. Samantha LEE, Research Student (ME) presented on “Automatic vision-based seam detection and tracking system for robotic welding / sealing planning”.



Mr. Hao JIN, Research Student (CEE) presented on “Effects of welding to mechanical of high strength S690 steel: Multi-pass welding in thick plates”.



Mr. Dong WANG, Research Student (BRE) presented on “Modelling the optimal tower crane location in high rise modular integrated construction”.

After a rigorous discussion among members of the Judging Panel including Prof. K. F. Chung, Ir Dennis Wan, and Ir H. S. Kan, the following were selected as winners of the Young Researchers Competition:

CNERC Outstanding Young Researcher Award 2021

Ms. LIN Xuemei, Department of Building and Real Estate

CNERC Young Researcher Awards 2021

Mr. Partha DEBNATH, Department of Civil and Environmental Engineering

Mr. JIN Hao, Department of Civil and Environmental Engineering

Ms. Samantha LEE, Department of Mechanical Engineering

Ms. ZHU Mengfei, Department of Civil and Environmental Engineering

CNERC Young Researcher Merit Awards 2021

Ms. ZHOU Bingchen, Department of Mechanical Engineering

Mr. Mohammed HUSSEIN, Department of Building and Real Estate

Mr. WANG Dong, Department of Building and Real Estate

CNERC Annual Technical Symposium 2021

Date: 30 September 2021 (Thursday)

Time: 2:00 p.m. – 5:35 p.m.

Venue: Z208, The Hong Kong Polytechnic University

Time	Activities
2:00 – 2:15 p.m.	Opening Remarks
2:15 – 2:35 p.m.	Invited Presentation: “ <i>Design and Construction using High Quality Chinese Steels in Hong Kong and Beyond</i> ” Dr. H. C. HO, Research Assistant Professor, CEE & CNERC-Steel
2:35 – 2:55 p.m.	Presentation 1: “ <i>Structural adequacy of high strength S690 and S960 welded H-sections with splices</i> ” Ms. Mengfei ZHU, Research Student, CEE
2:55 – 3:15 p.m.	Presentation 2: “ <i>Experimental and numerical investigation of CFST blind-bolted connections under tensile loading</i> ” Mr. Partha DEBNATH, Research Student, CEE
3:15 – 3:35 p.m.	Presentation 3: “ <i>Experimental and numerical study of the structural performance of bearing-type high strength steel bolted connections</i> ” Ms. Xuemei LIN, Research Student, BRE
3:35 – 3:45 p.m.	Break
3:45 – 4:05 p.m.	Presentation 4: “ <i>Control of continuous and discontinuous precipitation in advanced high-strength steels</i> ” Ms. Bingchen ZHOU, Research Student, ME
4:05 – 4:25 p.m.	Presentation 5: “ <i>A digital-twin based approach for sustainable logistics planning in modular integrated construction projects</i> ” Mr. Mohammed HUSSEIN, Research Student, BRE
4:25 – 4:45 p.m.	Presentation 6: “ <i>Automatic vision-based seam detection and tracking system for robotic welding / sealing planning</i> ” Ms. Samantha LEE, Research Student, ME
4:45 – 5:05 p.m.	Presentation 7: “ <i>Effects of welding to mechanical properties of high strength S690 steel: Multi-pass welding in thick plates</i> ” Mr. Hao JIN, Research Student, CEE
5:05 – 5:25 p.m.	Presentation 8: “ <i>Modelling the optimal tower crane location in high rise modular integrated construction</i> ” Mr. Dong WANG, Research Student, BRE
5:25 – 5:35 p.m.	Judging Panel Discussion